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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,325	02/11/2004	John R. Williams	19857.02	4105

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EXAMINER	
COLLINS, GIOVANNA M	
ART UNIT	**PAPER NUMBER**
3672	

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/776,325	WILLIAMS ET AL.	
	Examiner	Art Unit	
	Giovanna M. Collins	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 February 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stripper rubber, an insert embedded in the stripper rubber, a bearing assembly and an elastic seal must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-21 are objected to because of the following informalities:

In line 1 of claim 1, the applicant recites " A connector for optionally connecting a stripper rubber to drilling head equipment". The word "optionally" is confusing. It is unclear if the connector is really intended to use be used to connect the stripper rubber the drilling head equipment. The examiner suggests the applicant amend the phrase to recite - - A connector for selectively connecting a stripper rubber to drilling head equipment - - .

The words "optionally" or "optional" are used throughout claims 1-21 and the same objection applies to all the occurrences.

Claim 5 is objected because this claim recites the limitation "the barrel" in line 2. There is insufficient antecedent basis for this limitation in the claim., as this limitation has not been previously recited.

Claim 20 is objected to because of the following informalities: In claim 20, line 1, the phrase " The method of claim 1" should be changed to - - The method of claim 19- -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Hoagland 1,980,336.

Hoagland discloses a system (figs. 1,2 and 3) for connecting and disconnecting a first and second structural member comprising a first structural member (14), the first structural member comprising one or more cam pins (15) extending longitudinally from the first end; a second structural member (14) having an exterior and a first end and a second end, the second structural member comprising cam pin bores (18) longitudinally recessed in the first end and adapted to receive the one or more cam pins of the first structural member; and cam lock bores (20) having an exterior opening and oriented at an angle to at least one cam pin bore and positioned to partially intersect the cam pin bores to form an aperture; and rotatable cam locks (19) having a head and disposed within a cam lock bore so that the head is exposed to the exterior opening of the cam lock bore, whereby the cam lock engages a corresponding cam pin through the aperture upon optional rotation to an engaged position, and disengages the corresponding cam pin upon optional rotation to a disengaged position, wherein the first and second structural members are selectively connected when at least one cam lock is in an engaged position and are selectively disconnected when none of the one or more cam locks are in an engaged position.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams 4,949,796 in view of Hoagland '336.

Referring to claims 1, 9,10 and 18, Williams discloses (figs. 1-2) a system connection a stripper rubber to drill head equipment comprising drilling head equipment (fig. 1a, at 1), a connector for optionally connection a stripper rubber to drilling head equipment comprising a cylindrical metal adapter (at 1140) connectable to the equipment with a primary bore (140) to accommodate a downhole tubular, the adapter having cam pin bores (at 57) substantially parallel to the primary bore and adapted to house cam pins (57) and attached to a stripper rubber (38). Williams does not disclose cam lock bores or rotatable cam locks housed in the cam locks which engage the cam pins. Hoagland teaches a connection system having cam pin bores (18) in one member (13) adapted to house cam pins (15) and cam lock bores (20) offset from the cam pin bore so the two bores partially intersect, cam pins (15) that attach to a second member (14) and are insertable into the cam bores and cam locks (19) that are housed in the cam lock bores and optionally engage the cam pins to connect two members. Hoagland teaches this connection system helps to clamp the end faces of the two member members together and the cam locks also allow the members to be self locking such that any rotation of the first member serves to lock the cam pins more firmly in position (page 2, col. 1, lines 71-87). As it would be advantageous to have a connection system that firmly clamps the adapter to the stripper rubber and is also self locking, it

would be obvious to one of ordinary skill in the art to modify the connector disclosed by Williams to have cam lock bores or rotatable cam locks housed in the cam locks which engage the cam pins in view of the teachings of Hoagland.

Referring to claims 2 and 11, Williams disclose cam pins have a threaded end (at end of element 57) and a pin end (at 57) where the cam pins threadedly attach to the stripper rubber (38) and the pin end insert into the cam pin bore (at 57) of the adapter.

Referring to claims 3 and 12, Williams disclose an insert (at 120) embedded in the strip rubber and the cam pin (57) attach to the insert.

Referring to claims 4 and 13, Williams disclose a bearing assembly (fig. 2, at 80) mounted to the adapter.

Referring to claims 5 and 14, Williams discloses a seal (40) between the adapter (at 140) and the barrel or equipment

Referring to claims 6 and 15, Hoagland teaches cam lock bores (18) substantially perpendicular to cam pin bores (20).

Referring to claims 7 and 16, Hoagland teaches cam lock bore (18) located obliquely to cam pin bores (20).

Referring to claims 8 and 17, Hoagland teaches biased cam locks (see fig. 2, outline of element 19).

Referring to claim 19, Williams disclose a method for connecting tripper rubber to drill head equipment comprising providing drilling head equipment (1), providing a stripper rubber (38) having an insert (122), providing an adapter (at 140) between the equipment and the stripper rubber and connected to the equipment, the adapter having

cam pin bores (at 57), providing cam pins (57) attached to the stripper rubber insert and the cam pins being disposed in the cam pin bores of the adapter. Williams does not disclose cam lock bores, rotatable cam locks housed in the cam locks which engage the cam pins or rotating the cam locks to engage the cam pins through the aperture. Hoagland teaches a connection system having cam pin bores (18) in one member (13) adapted to house cam pins (15) and cam lock bores (20) offset from the cam pin bore so the two bores partially intersect, cam pins (15) that attach to a second member (14) and are insertable into the cam bores and cam locks (19) that are housed in the cam lock bores and optionally engage the cam pins to connect two members and rotating the cam locks to engage the cam pins through the aperture (page 1, lines 27-34). Hoagland teaches this connection system helps to clamp the end faces of the two member members together and the cam locks also allow the members to be self locking such that any rotation of the first member serves to lock the cam pins more firmly in position (page 2, col. 1, lines 71-87). As it would be advantageous to have a connection system that firmly clamps the adapter to the stripper rubber and is also self locking, it would be obvious to one of ordinary skill in the art to modify the connector disclosed by Williams to have cam lock bores, rotatable cam locks housed in the cam locks which engage the cam pins or rotating the cam locks to engage the cam pins through the aperture in view of the teachings of Hoagland.

Referring to claim 20, Hoagland teaches rotating the cam lock to disengage the cam locks from the cam pins (page 2, lines 87-89).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gmc

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